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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,358	06/26/2003	Naohiko Kikuchi	1403-0250P	4535

2292 7590 07/29/2005

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EXAMINER
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MAKI, STEVEN D

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/606,358

Applicant(s)

KIKUCHI ET AL.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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1) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) **Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida (EP 1072446) in view of Marzocchi (US 3865682) and Watanabe et al (US 2002/0176986) and optionally further in view of Argarwal et al (US 5173136).**

As to claims 1-8, Uchida, Marzocchi, Watanabe et al and the optional Argarwal et al are applied as in paragraph 2 of the last office action dated 3-1-05 (paragraph 2 of the last office action is incorporated herein by reference).

As to new claim 9 (average fiber diameter of 3-50 micrometers and average length of 0.1-3 mm), Uchida prefers an average fiber diameter of 3-50 micrometers (paragraph 15) and an average length of 0.1-3 mm (paragraph 16)

As to new claim 10 (glass fiber), Uchida teaches preferred fibers as including glass fibers (paragraph 19).

As to new claim 11, the applied secondary art to Marzocchi, Watanabe et al and the optional Agarwal et al suggest treating fibers with RFL.

#### Remarks

3) Applicant's arguments with respect to claims 9-11 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 6-1-05 have been fully considered but they are not persuasive.

Applicant argues that Uchida fails to disclose the use of a surface treating agent for the non-metal fiber. More properly, Uchida expresses a desire for the fibers to remain bound to the rubber of the tread to prevent the fibers from dropping from the tread surface during running and thereby deteriorating the effect of pushing the water film generated between the frozen road surface and the tire surface (paragraphs 13, 16) and the secondary art to Marzocchi, Watanabe et al and the optional Argarwal et al, provide ample motivation (increased adhesion between fibers and rubber) to treat Uchida's fibers with RFL.

Applicant argues that Marzocchi, Watanabe and Agarwal do not teach employing fibers which are oriented in the tread thickness direction. The teaching to employ fibers which are oriented in the thickness direction is found in Uchida. Furthermore, In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that the claimed invention exhibits unexpected results of improved braking properties and abrasion resistance properties as evidenced by examples 1 and 2 of the specification. The examples in the specification have been considered but are not persuasive of obviousness. The results of examples 1 and 2 are not commensurate in scope with the claims since (1) the results are for glass fibers and the treating agent being sulfur containing mercaptosilane for improving adhesion strength to rubber whereas (2) claim 1 recites (a) "non-metal short fiber" instead of

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glass fibers and (b) "surface-treated" instead of treated with "sulfur containing mercaptosilane". It is noted, for example, that "surface-treated" in claim 1 is sufficiently broad to read on a lubricant / release agent for *decreasing* adhesion between the fibers and the rubber. It is also noted that claims 1-11 read on the treating agent being RFL and that the original disclosure contains no comparative example using RFL.

Applicant comments that Uchida corresponds to comparative example 3. The examiner disagrees since "Usual Extrusion" was used for comparative example 3 whereas Uchida forms the tread using calendaring and folding as shown in figure 2.

Applicant refers to comparative example 2. This example is limited to the treating agent being sulfur containing mercaptosilane. Claims 1-11 are not limited to the treating agent being sulfur containing mercaptosilane.

Applicant argues that Agarwal et al cannot be combined with Uchida since the dimensions (fiber thickness = 130-430 micrometers) of the fiber in Agarwal et al conflict with the dimensions (average fiber diameter = 1-100 micrometers) of the fiber disclosed by Uchida. The examiner disagrees. Uchida and Agarwal et al can be combined since (a) they are both directed to the use of short fibers in a tire tread, (b) the fiber dimensions in Agarwal et al and Uchida differ by at most 330 micrometers and (c) the RFL treatment of short fibers suggested by Agarwal et al does not require an average fiber of 130-430 micrometers.

4) No claim is allowed.

5) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

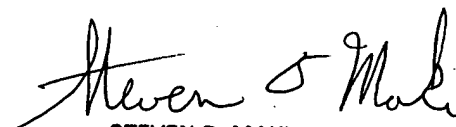
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki  
July 26, 2005

  
STEVEN D. MAKI  
PRIMARY EXAMINER  
~~GROUP 1300~~  
AV 1733 7-26-05